



## Charlotte County Towns of Charlotte Court House, Drakes Branch, Keysville, and Phenix

### Water Source Overview

Major sources include groundwater wells and the Keysville Reservoir.

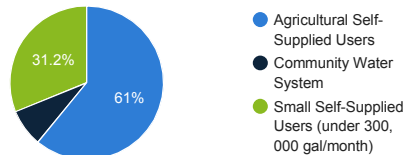
**\*Table 1:** Reported (2010) and projected (2040) water use by system type for Charlotte County in MGD

Type	Reported Use 2010 MGD	Projected Use 2040 MGD
Agricultural Self-Supplied Users	2.096	2.096
Community Water System	0.271	0.798
Small Self-Supplied Users (under 300,000 gal/month)	1.071	1.083

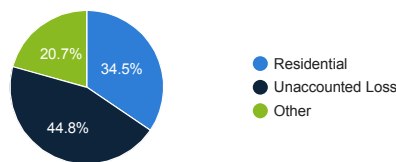
### Water Use by System Type

Approximately 10,698 people use private groundwater wells for residential water supply. All tables and graphs represent reported water use including Sales to other localities, if applicable.

**\*Figure 1:** Percentage of reported water use by system type in 2010 (No use data shown on graph if less than .01 MGD: Refer to Table 1)



**\*Figure 2:** Disaggregated water use percentages for Community Water Systems in 2010 (No graph shown if no disaggregated use data reported)



**\*Table 2:** Reported (2010) and projected (2040) groundwater and surface water use for Charlotte County in MGD

Reported 2010 Groundwater Use (MGD)	Reported 2010 Surface Water Use (MGD)	Projected 2040 Groundwater Use (MGD)	Projected 2040 Surface Water Use (MGD)
2.26	1.18	2.49	1.49

**\*Figure 3:** Charlotte County highlighted in the Commonwealth of Virginia



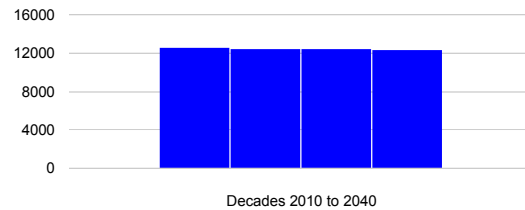
### Projected Water Demand

Future deficits in water supply through the planning period of 2040 may be anticipated as follows: Drakes Branch deficit of 0.153 MGD by 2020; Phenix deficit of 0.0002 MGD by 2010; Charlotte Court House deficit of 0.008 MGD by 2020. The water supply plan recommends several alternatives for meeting this additional demand in the future: clarification of the safe yield for Keysville Reservoir; development of additional groundwater supply in the towns of Drakes Branch, Charlotte Court House, and Phenix; development of a water treatment plan at the Drakes Branch Lake; and system interconnections between towns.

**\*Table 3:** Charlotte County population projections by decade from 2010 to 2040 (data gathered from VEC projections - 05/20/13)

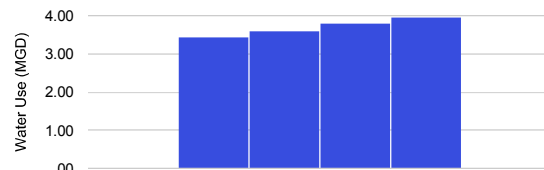
2010	2020	2030	2040	% Change (2010-2040)
12,586	12,523	12,427	12,332	0.0%

**\*Figure 4:** Charlotte County population projections by decade for 2010, 2020, 2030 & 2040



**\*Table 4 & Figure 5:** Charlotte County water demand trends by decade for 2010, 2020, 2030 & 2040 in MGD

Reported Use 2010 MGD	Projected Use 2020 MGD	Projected Use 2030 MGD	Projected Use 2040 MGD	Percent Change (2010-2040)
3.44	3.62	3.80	3.98	15.7%



### Drought Management Practices

The Towns of Drakes Branch and Phenix have adopted ordinances to implement and enforce the Drought Response and Contingency Plan. The other localities will adopt an emergency ordinance should the need arise. [Charlotte County and Towns Regional WSP]